

REMARKS

As the Examiner is aware, this case is part of an original "bulk filing" by Motorola. Special IDS procedures have been approved for these cases, and in this case several 1449's have kindly been considered. A supplemental IDS filing is also included with this filing.

The rejection of Claim 115 is now moot in view of the amendment to the claims, specifying a novel and unobvious semiconductor structure, as follows:

- a) a monocrystalline Group IV substrate;
- b) an amorphous oxide material in contact with the monocrystalline substrate;
- c) a monocrystalline metal oxide layer selected from the group consisting of alkaline earth metal titanates, alkaline earth metal zirconates, alkaline earth metal hafnates, alkaline earth metal tantalates, alkaline earth metal ruthenates, alkaline earth metal niobates, alkaline earth metal vanadates, alkaline earth metal tin-based perovskites, lanthanum aluminate, lanthanum scandium oxide, gadolinium oxide and mixtures thereof contacting the amorphous oxide material;
- d) a metal or metal oxide capping layer in contact with said monocrystalline metal oxide layer;
- e) a compound semiconductor template layer in contact with said capping layer; and
- f) a monocrystalline compound semiconductor layer in contact with said template layer.

Claim 118 is similarly limited regarding elements b) and c). This claim, and Claims 116 and 117, find support in e.g., original Claims 27 and 87.

In this regard, the claims herein have been amended in accordance with discussions held between Applicants and the Patent Office, and these amendments place

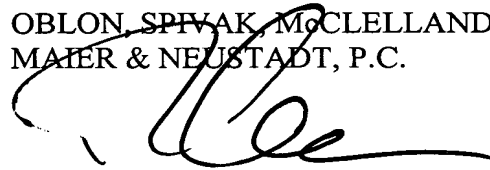
this case in condition for allowance by describing, in addition to other patentable features, a novel and unobvious semiconductor structure which is, itself, both novel and unobvious. Note, for example, the requirement that the amorphous oxide material be in contact with the monocrystalline substrate, the requirement that the monocrystalline metal oxide contact the amorphous oxide material, and the lack of a metal nitride layer. These amendments have resulted from a study of the references cited in the various IDSs in this "bulk filing" and from associated discussions with Examiner Baumeister, SPE Chaudhury, SPE Flynn, SPE Lee, and others at the PTO.

As noted above, the amendment to the rejected claims places this case in condition for allowance. Accordingly, early notice to this effect is respectfully requested.

With regard to the double patenting rejection, the Office is kindly holding these rejections in abeyance until the indication of allowable subject matter. In this regard, Applicant is now preparing their response to the double patenting rejections in this series of cases, which is expected to address all such rejections.

Respectfully submitted,

OBLON, SPIVAK, MCCLELLAND,
MAIER & NEUSTADT, P.C.



Richard L. Treanor
Attorney of Record
Registration No. 36,379

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 06/04)